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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/013,072	12/10/2001	Thomas H. Orac	P-2011/N-7696	1394

7590 09/21/2004

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Nashville, TN 37219

EXAMINER

NGUYEN, TAM M

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/013,072	Applicant(s) ORAC, THOMAS H.	
	Examiner Tam M. Nguyen	Art Unit 1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 June 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 8-15 is/are pending in the application.
- 4a) Of the above claim(s) 16-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Kalback (5,198,101).

Kalback discloses a process for producing an anisotropic pitch product by heating a petroleum or coal-derived fraction to a desired temperature and contacting the heated pitch with a sparging gas (e.g., steam or nitrogen). (See col. 3, line 62 through col. 4, line 2; col. 5, line 32 through col. 6, line 26). It is noted that Kalback does not disclose that a coal tar is heated until it becomes a soft pitch. However, Kalback discloses a coal tar is heated to a temperature of from 270 to 425° C for 4 to 10 hours. Therefore, it would be expected a soft pitch would be obtained in the heating step of Kalback. It is noted that Kalback does not disclose that the temperature of the batch is maintained at a substantially steady level with a temperature variance of no greater than 10° C. However, Kalback discloses that a hydrocarbon feed is contacted with nitrogen (sparging gas) at a reaction temperature of 385° C. It would be expected that the reaction is maintained at 385° C. Therefore, the temperature variance is less than 10° C. (See example 1)

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 3-6 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalback (5,198,101).

The process of Kalback is as discussed above.

Kalback does not disclose the softening point of the soft pitch, does not disclose that the batch is maintained at a temperature of between about 225 to 275° C, does not disclose the flash point of the batch is higher than about 270° C or to about 300° C, and does not disclose that the flash point in the batch increases at a rate faster than the rate the soften point increases.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Kalback by heating the coal tar at the claimed temperatures because any coal tar can be used in the process of Kalback. If a light fraction of coal tar is used in the process of Kalback, one of skill in the art would employ a low

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heating temperature such as the claimed temperature because the heating temperature is dependent on the characteristics of the coal tar feed.

Consequently, the modified process of Kalback would produce a pitch having a softening point and a flash point as claimed and the flash point in the batch would increase at a rate faster than the rate the softening point increases as claimed because of the similarities between the claimed process and the modified process of Kalback in terms of feedstock, heating temperature and sparging gas.

### ***Response to Arguments***

The argument that Kalback discloses an anisotropic mesophase pitch while the present invention is directed to producing an isotropic pitch is not persuasive because the limitation “isotropic impregnation pitch” is not in the claims.

The argument that nothing in Kalback discloses maintaining the temperature at a steady level with a temperature variation of no greater than about 10° C is not persuasive because the process of Kalback is operated at 385° C and there is no evidence that the temperature was fluctuated. Therefore, the limitation the “temperature variation of no greater than about 10° C” is embraced by the reference.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam M. Nguyen whose telephone number is (703) 305-7715. The examiner can normally be reached on Monday through Thursday.

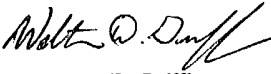
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 703-308-6824. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Tam M. Nguyen  
Examiner  
Art Unit 1764

TN

  
Walter D. Griffin  
Primary Examiner